

**ABSTRACT OF THE DISCLOSURE****MECHANISM TO CACHE REFERENCES TO JAVA RMI REMOTE OBJECTS  
IMPLEMENTING THE UNREFERENCED INTERFACE**

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An efficient caching mechanism for Java RMI remote objects is implemented. In order to efficiently implement a cache for these connection objects, the client JVM may hold a normal reference to the object while the connection is in use and for a period of time thereafter. A thread, referred to as a connection expiration thread, is used as a timer for each connection. After that period of time expires, only a weak reference is held by the client JVM and the connection may be garbage collected. The period of time may be adjusted to suit the needs of the server JVM. A shorter time may be used to ensure responsiveness of the server JVM to memory demand and shutdown requests, while a longer time may be used to enhance the effectiveness of the caching mechanism by forcing connections to stay open longer after they are no longer being used and before they are automatically destroyed due to garbage collection by the server JVM.

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